

IN THE CLAIMS:

1-9 (Cancelled)

10. (New) A filter element for removing contaminants from gases comprising a monolithic porous carbon structure wherein the filter element is a single piece and is not granular and is not composed of granular carbons bound together by a binder and the walls of the carbon monolithic structure have continuous voids or pores through which liquid or vapours can pass.

11. (New) A filter element according to claim 1, wherein the monolithic porous carbon structure has a cell structure wherein the channel size is between about 100microns and 2000microns and the wall thickness is between about 100microns and 2000microns with an open area of between about 30 and 60%.

12. (New) A filter element according to claim 1, wherein the monolithic porous carbon structure has a surface area of at least $700\text{m}^2/\text{g}$.

13. (New) A filter element according to claim 2, wherein the monolithic porous carbon structure has a surface area of at least $700\text{m}^2/\text{g}$.

14. (New) A filter element as claimed claim 1, wherein the carbon monolithic structure has a surface area in excess of $1000\text{m}^2/\text{g}$.

15. (New) A filter element as claimed claim 2, wherein the carbon monolithic structure has a surface area in excess of $1000\text{m}^2/\text{g}$.

16. (New) A filter element according to claim 1, wherein the carbon monolithic structure has a length of about 1 to 10 cm.

17. (New) A filter element according to claim 1, wherein the carbon monolithic structure is produced by partially curing a phenolic resin to a solid, comminuting the partially cured resin, extruding the comminuted resin, sintering the extruded resin so as to produce a form-stable

sintered product and carbonising the form-stable sintered product.

18. (New) A filter element according to claim 2, wherein the carbon monolithic structure is produced by partially curing a phenolic resin to a solid, comminuting the partially cured resin, extruding the comminuted resin, sintering the extruded resin so as to produce a form-stable sintered product and carbonising the form-stable sintered product.

19. (New) A filter structure according to claim 1, comprising a plurality of filter elements wherein each of the filter elements is from about 1 to 3 cm in length separated from an adjacent filter element by a gap of about 0.5 to 1.5 cm.

20. (New) An apparatus for the removal of contaminants from gases such as air, comprising a container containing (i) a filter element; (ii) a gas inlet for the container and (iii) a gas outlet for the container whereby gases can pass via the inlet through the filter element and out through the outlet and in which the filter element comprises a monolithic porous carbon structure which is a single piece and is not granular and is not composed of granular carbons bound together by a binder and the walls of the carbon monolithic structure have continuous voids or pores through which liquid or vapours can pass.

21. (New) Apparatus according to claim 11, wherein the monolithic porous carbon structure has a cell structure wherein the channel size is between about 100microns and 2000microns and the wall thickness is between about 100microns and 2000microns with an open area of between about 30 and 60%.

22. (New) Apparatus according to claim 12, wherein the monolithic porous carbon structure has a surface area of at least $700\text{m}^2/\text{g}$.

23. (New) Apparatus as claimed claim 11, wherein the carbon monolithic structure has a surface area in excess of $1000\text{m}^2/\text{g}$.

24. (New) Apparatus as claimed claim 12, wherein the carbon monolithic structure has a surface area in excess of $1000\text{m}^2/\text{g}$.

25. (New) Apparatus as claimed claim 11, wherein there is a plurality of filter elements and wherein each of the filter elements is from about 1 to 3 cm in length and is separated from an adjacent filter element by a gap of about 0.5 to 1.5 cm.

26. (New) Apparatus as claimed claim 12, wherein there is a plurality of filter elements and wherein each of the filter elements is from about 1 to 3 cm in length and is separated from an adjacent filter element by a gap of about 0.5 to 1.5 cm.

27. (New) Apparatus according to claim 11, wherein the carbon monolithic structure is produced by partially curing a phenolic resin to a solid, comminuting the partially cured resin, extruding the comminuted resin, sintering the extruded resin so as to produce a form-stable sintered product and carbonising the form-stable sintered product.

28. (New) Apparatus according to claim 12, wherein the carbon monolithic structure is produced by partially curing a phenolic resin to a solid, comminuting the partially cured resin, extruding the comminuted resin, sintering the extruded resin so as to produce a form-stable sintered product and carbonising the form-stable sintered product.

29. (New) Apparatus according to claim 11, further comprising a respirator.